

### ABSTRACT OF THE DISCLOSURE

A fluorescence observing apparatus has an excitation filter unit for transmitting only exciting light with particular wavelengths, of illuminating light, and an absorption filter unit for transmitting only fluorescent light produced from a specimen by irradiating the specimen with the exciting light to block the exciting light. In this case, the space between the half-value wavelength on the long-wavelength side of the excitation filter unit and the half-value wavelength on the short-wavelength side of the absorption filter unit is in the range of 6-12 nm, and variations in the half-value wavelengths of the excitation filter unit and the absorption filter unit where humidity is changed from 10 % to 95 % are within 0.5 nm. Whereby, faint fluorescent light is efficiently taken out and the observation can be made.